



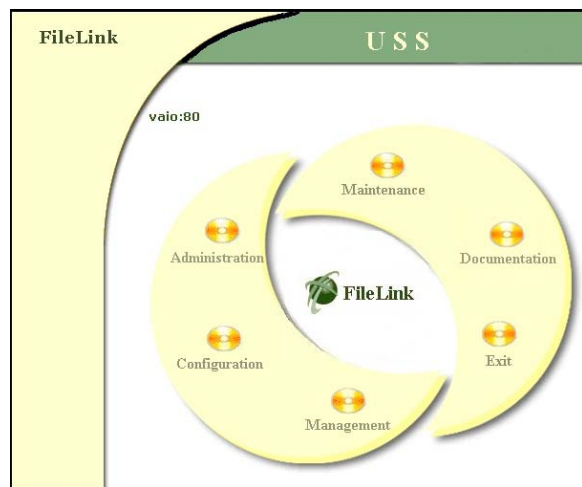
USDesign USS 3.0
is a platform independent optical storage management software solution for jukebox libraries and desktop optical devices.



Meta-Cache

- **USS version 3.0** has been extended to enable the caching of directories and file headers (metadata) for volumes managed by USS in an internal database.
- **Metadata** consists of directory or file name, directory path, creation date, access date, modification date, size and any other information relative to the directory or file. This new capability, called "Meta-Cache," provides [metadata] read access of optical media in a jukebox library at the performance of hard disk.
- **Meta-Cache** provides users the option of initializing the media surface and adding its metadata to the internal database; thereby improving read requests for directory hierarchy transversals on the media surface. This greatly improves the performance when accessing jukebox volumes via NT Explorer or API function calls for read requests to the metadata contained on the volume(s) selected for Meta-Cache journaling. Performance is best achieved for "write-active" optical media, or media that has read-intensive access. Meta-Cache will not cache the actual file data for the volume.

- **Meta-Cache** can be populated/updated in two ways: (1) During volume definition (volume import, media initialization, media search); and (2) When directories/files are updated (created, deleted, moved, renamed, etc.).
- **Meta-Cache** will be referenced to satisfy normal operating system I/O requests for directory/file metadata from selected media. If the request can be satisfied, then the metadata will be returned to the user. If the request cannot be satisfied, then the metadata will be retrieved from the physical media surface (which may require the media to be moved from a storage shelf to an internal jukebox drive), and the database will be updated.



- **Meta-Cache.** The user may turn off Meta-Cache and USS will continue to function, except all directory/file information will be retrieved from the physical media surface. Meta-Cache incorporates internal policies which govern the size of the database, physical memory requirements and location of the database file.





Platform Independence

USS is implemented using the JAVA™ and HTML programming languages, and the RPC protocol. There is only one code base for USS, thus simplifying maintenance and future development. USS can be installed on any system that supports the JAVA™ virtual machine (VM).

Architecture

- USS is modular in its architectural design, which allows complete flexibility and growth for future requirements.
- The **Medium Changer Module** transparently controls, monitors, schedules and moves media in a jukebox. Planning algorithms are used to optimize performance by queuing requests to the jukebox. Scheduling algorithms select media in the queue based on several factors, and then manage selection of the internal drives for media access.
- The **File System Module** provides a unique method of reading supported file systems by scanning the surface of the optical media and interpreting the embedded format; thereby selecting the appropriate file format to meet the requirements of the application.
- The **Network Interface Module** provides access to optical drives using standard network protocols.
- The **Web Maintenance Module** provides a real-time information gathering, tracking and reporting system, as well as media management (browser-based) for your optical hardware.

File System Independence

The **UDF file system** is standards based. The OSTA (Optical Storage Technology Association) has developed UDF as a cross platform file system. Media written with the UDF file system is portable across many platforms. USS supports UDF 1.02 and 1.50 file system formats. USS supports the following media technologies with the UDF file system: Rewritable and WORM MO, DVD-RAM, DVD-R, DVD-RW, DVD-ROM, CD-R, CD-RW, and CD-ROM.

USS also supports the Rockridge extensions to the ISO-9660 file system for read-only access to CD-ROM media.

FileLink Home

Administration Configuration Management Maintenance Documentation Exit USS

main:00 - Management - JBC000 - Volume List

Total Storage Elements	20
Total Licensed Storage Elements	10
Number of Media Surfaces	4
Number of Volumes	4

Import Media List Release All Volumes

Released From Cache

Volume Name	Shelf	Side	Status	Release
JBC000_1A	11	A	mounted	<input type="checkbox"/>
JBC000_2A	12	A	mounted	<input type="checkbox"/>
JBC000_3A	13	A	mounted	<input type="checkbox"/>
JBC000_4A	14	A	mounted	<input type="checkbox"/>

Released From Cache

Supported Environments

- Windows NT 4.0 with Service Pack 6 or higher
- Windows 2000 Server or Workstation
- Tru64 UNIX 4.0d, 4.0e, 4.0f, 5.0, 5.1a
- Solaris SunOS 5.7, 5.8, 5.9 (32 and 64-bit)
- RedHat Linux 7.2, 7.3, 8.0
- OpenVMS Alpha 7.2 or higher

For more information, call 1-800-622-8732, or visit www.objectivedatastorage.com

